

# NEDSS Base System 1.2 Release Notes



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## 2 Introduction

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Release 1.2 of the NEDSS Base System (NBS) is a major release that includes the following:

- Implementation of Enhancement Requests including:
  - Implement alerting capabilities to notify users via email in near real time when a Laboratory Report is received meeting predefined criteria
  - Provide a user interface to manage select tables in System Reference Table (SRT) database:
    - LAB\_CODING\_SYSTEM
    - LOINC\_code
    - LOINC\_condition
    - SNOMED\_code
    - SNOMED\_condition
    - LAB\_RESULT
    - LAB\_TEST
    - LABTEST\_LOINC
    - LAB\_RESULT\_SNOMED
    - CODE\_VALUE\_GENERAL
  - Provide support of Microsoft SQL Server 2005
  - Provide the ability to search for a Laboratory Report using Accession Number using Patient Event Search
  - Update data types for select RDB and PublicHealthCaseFact fields to change the data type from String to Numeric
  - Update Patient De-duplication Similar algorithm to remove 'Current Sex' as a required field
- Resolution of Application Defects

**It is strongly recommended that you review all sections of this document and the NBS Installation Guide prior to executing the installation. Please contact the NBS Team for additional details on information contained in this document.**

## 3 Distribution Package

Release 1.2 comes with the following media:

- **Disc 1 – Installation and Documentation:**
  - The NBS Application Enterprise Archive (EAR) file, associated configuration files and the database scripts
  - Newly created and updated documentation

## 4 Change Requests

### 4.1 Functional Enhancement Requests

#### #14783 – Implement Alerting Capabilities:

Alerting provides the ability to notify users via email in near real time when a Laboratory Report is received meeting predefined criteria. When a Laboratory Report is added to the NBS via manual, external or electronic entry, the Laboratory Report will be compared against user defined alert triggers to determine if an alert is needed.

[Return to Alert Administration Main Menu](#)  
*\* Indicates a Required Field*

**Search Criteria:**

\* Condition: Anthrax

\* Jurisdiction: ALL

\* Public Health Event: Laboratory Report

Search Cancel

**Alert Details:**

Condition: Anthrax

Jurisdiction: ALL

Public Health Event: Laboratory Report

Select User:

Macauley, Stephen  
Montney, Charles  
Muthukumaraswamy, Karthi

Add >  
< Remove

Hildebrandt, Christi

\* Severity: High

Update Alert Add Alert Delete Simulate

The NBS utilizes the following algorithm to determine when an alert is needed:

```
For each Test Result contained within the laboratory report
{
  If (Coded Result is SNOMED and mapped to a condition) (available via
  nbs_srte..snomed_condition)
    Record condition;
  Else if (Coded Result is Locally Defined for the specified CLIA number and
  mapped to a SNOMED (available via nbs_srte..labresult_snomed) and the
  associated SNOMED is mapped to a condition (available via
  nbs_srte.snomed_condition))
    Record condition;
  Else If (Resulted Test is LOINC and mapped to a condition) (available via
  nbs_srte..loinc_condition)
    Record condition;
  Else If (Resulted Test is Locally Defined and mapped to a condition for the
  specific CLIA number) (available via nbs_srte..labtest_progarea_mapping)
    Record condition;
  Else If (Coded Result is Locally Defined and mapped to a condition for the
  specific CLIA number) (available via nbs_srte..lab_result)
    Record condition;
  Else ()
    No condition recorded;
}
If unique conditions are returned for each Test Result send one alert per
condition otherwise send one alert for the recorded condition
```

When the criteria for an alert trigger are satisfied, the NBS sends an email to those users who have been assigned to the alert trigger. Each user can be notified of the

alert on up to three email addresses, configured using the “Manage User Email” user interface.

[Return to Alert Administration Main Menu](#)

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**Manage Email Addressess:**

**Users List:**

**Email Address 1:**

**Email Address 2:**

**Email Address 3:**

In order to verify an alert trigger is properly configured, the alert trigger can be tested using the “Simulate” functionality which will send a test email to all users assigned to the alert trigger.

**Please reference SRT and Alert Administration User Guide.ppt for more detailed technical instructions on configuring alerting and setting up alert triggers.**

#### **#14784 – System Reference Table (SRT) Administration Module:**

Provides an administration module to manage select tables in System Reference Table (SRT) database, including:

- LAB\_CODING\_SYSTEM
- LOINC\_code
- LOINC\_condition
- SNOMED\_code
- SNOMED\_condition
- LAB\_RESULT
- LAB\_TEST
- LABTEST\_LOINC
- LAB\_RESULT\_SNOMED
- CODE\_VALUE\_GENERAL

#### Manage Modules

- 📁 **Laboratories**
  - 📄 [Manage Laboratories](#)
- 📁 **Local Lab Tests**
  - 📄 [Manage Lab Tests](#)
  - 📄 [Manage Link between Lab Test and LOINC](#)
- 📁 **LOINC Codes**
  - 📄 [Manage LOINCs](#)
  - 📄 [Manage Link between LOINC and Condition](#)
- 📁 **Local Lab Results**
  - 📄 [Manage Results](#)
  - 📄 [Manage Link between Lab Result and SNOMED](#)
- 📁 **SNOMED Codes**
  - 📄 [Manage SNOMEDs](#)
  - 📄 [Manage Link between SNOMED and Condition](#)
- 📁 **Code Value General**
  - 📄 [Manage Codes for Existing Code Set](#)
- 📁 **Reset Cache**

**Please reference SRT and Alert Administration User Guide.ppt for more detailed instructions on using the SRT Administration module.**

#### **#14582 – Provide support of Microsoft SQL Server 2005**

For NBS sites using Microsoft SQL Server Relational Database Management System, the NBS now supports version 2005 (with latest patches).

**Please contact the NBS Team for additional details on porting the NBS to utilize Microsoft SQL Server 2005.**

#### **#12425 – Ability to Search Laboratory Reports by Accession Number**

Provide the ability to search for a Laboratory Report using Accession Number using Patient Event Search.

Demographic Search

Event Search

*Note: The Event ID must be an exact match.*

Event ID Type:

Event ID:

Demographic Search

Event Search

### **#14312 –Data Type Changes in Reporting Database (RDB) and PublicHealthCaseFact:**

Convert the data types for the following data elements from String to Numeric:

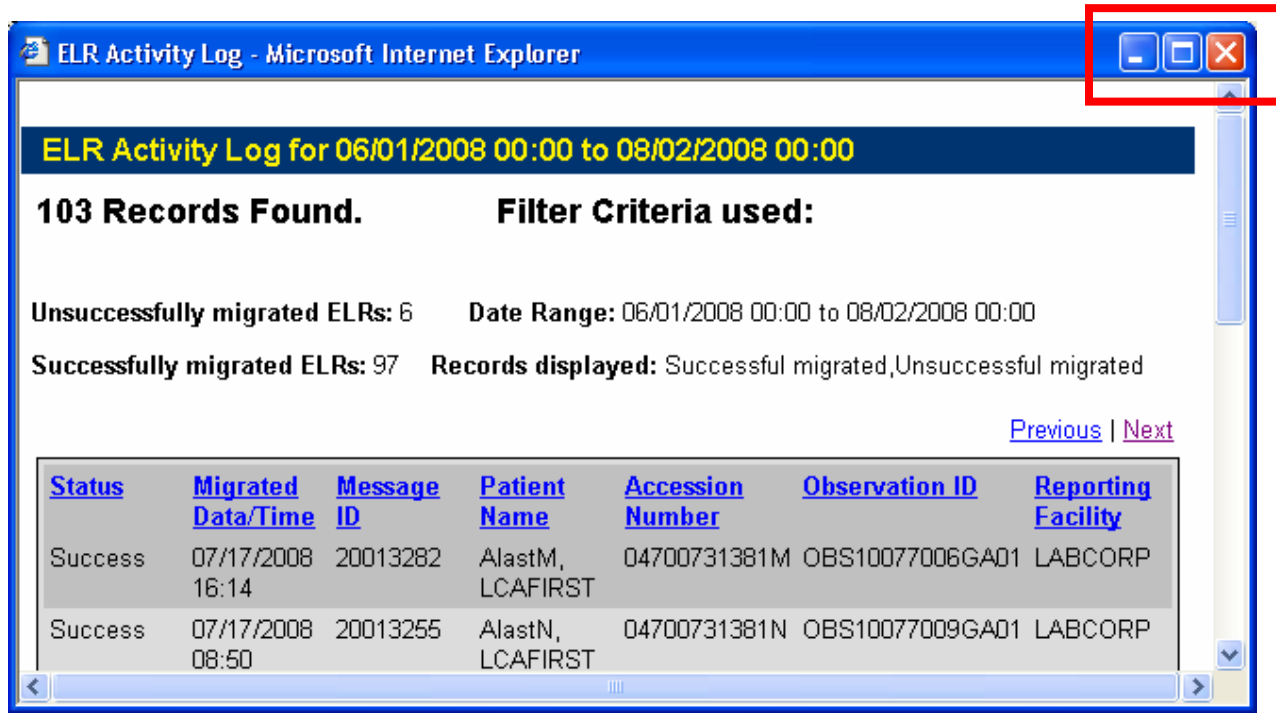
- MMWR Week
- MMWR Year
- Age Reported
- Patient Age at Onset

By changing the data type, the Advanced Filter in the NBS Reporting module will provide those operators relevant to Numeric data types. In order for this change to be reflected for existing Reports, data sources containing these data types should be updated using the Report Administration module.

### **#13596 – Resizable ELR Activity Log Results Window**

Allows the user to resize the ELR Activity Log Results Window.





**ELR Activity Log for 06/01/2008 00:00 to 08/02/2008 00:00**

**103 Records Found.**      **Filter Criteria used:**

Unsuccessfully migrated ELRs: 6      Date Range: 06/01/2008 00:00 to 08/02/2008 00:00

Successfully migrated ELRs: 97      Records displayed: Successful migrated, Unsuccessful migrated

[Previous](#) | [Next](#)

<a href="#">Status</a>	<a href="#">Migrated Data/Time</a>	<a href="#">Message ID</a>	<a href="#">Patient Name</a>	<a href="#">Accession Number</a>	<a href="#">Observation ID</a>	<a href="#">Reporting Facility</a>
Success	07/17/2008 16:14	20013282	AlastM, LCAFIRST	04700731381M	OBS10077006GA01	LABCORP
Success	07/17/2008 08:50	20013255	AlastN, LCAFIRST	04700731381N	OBS10077009GA01	LABCORP

#### **#14383 – Remove ‘Current Sex’ from Patient Deduplication System Identified Algorithm:**

‘Current Sex’ will no longer be required when the System Identified Patient Deduplication process is executed in order for a Similar match to be returned.

#### **#14587 – Refactoring of Notification Auto-Resend:**

The NBS has retired the use of Java Messaging Service (JMS) for use with Notification Auto-Resend. As a result, when a Notification Auto-Resend is triggered, View Investigation > Notification section should immediately reflect that a new Notification request is waiting processing (e.g., APPROVED).

#### **#14537 – Refactoring of Extraction, Transformation and Load of Hepatitis Data:**

The SAS procedures utilized to extract, transform and load Hepatitis data have been improved to reduce the overall elapsed time to execute the procedures.

#### **#14770 – Separation of Patient Deduplication Same and Similar Processes:**

The existing Patient Deduplication process has been separated into two distinct jobs executed by the NBS Scheduler.



### **#14780 – Support for Microsoft Windows 2003 Server Service Pack 2**

The standard operating environment for the NBS is now supported Service Pack 2 of Microsoft Windows 2003.

### **#15011 – Vaccinations: New and Updated Links for Vaccination Schedules:**

Existing Vaccination Schedules displayed in the Vaccination module have been updated:

Childhood Schedule (birth to 6 years old) -

[http://www.cdc.gov/vaccines/recs/schedules/downloads/child/2008/08\\_0-6yrs\\_schedule\\_pr.pdf](http://www.cdc.gov/vaccines/recs/schedules/downloads/child/2008/08_0-6yrs_schedule_pr.pdf)

Adolescent Schedule (7 to 18 years old) -

[http://www.cdc.gov/vaccines/recs/schedules/downloads/child/2008/08\\_7-18yrs\\_schedule\\_pr.pdf](http://www.cdc.gov/vaccines/recs/schedules/downloads/child/2008/08_7-18yrs_schedule_pr.pdf)

A new Vaccination Schedule has been added to the Vaccination module:

Adult Schedule (over 18 years old) -

<http://www.cdc.gov/vaccines/recs/schedules/downloads/adult/07-08/adult-schedule.pdf>

## ***4.2 Application Defect Corrections***

In Release 1.2, the following application defects were resolved:

### **#14762 – SR100: Multiple Rows in Data Mart:**

If a Summary Report has two or more notification requests, duplicate rows would be added to the SR100 data mart.

### **#15365 – Phone Extension not saved when Phone Number not Entered:**

If a user entered in a phone extension without a phone number, the phone extension was not saved.

#### **#15474 –Current Age Not Calculating When Date Manually Entered:**

Current age was not being calculated when DOB was entered using the text entry box rather than the pop-up calendar.

#### **#15469 – Case Investigation: Performance Degradation with Associated Organization(s)**

If the same Organization is associated to hundreds of Case Investigations, the performance of the Case Investigation was degraded when Viewing or Editing the Case Investigation.

#### **#15473 – ELR: Message Queuing due to invalid Zip Code:**

If a batch of ELRs are processed by the NBS and an error is encountered in one ELR related to Zip Code, the processing of the batch would stop.

## ***5 Documentation***

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In addition to the new functionality being delivered with Release 1.2, the following documentation has been created or updated:

- Disc1\NBS Deployment Methodology\02\_INSTALLATION and CONFIGURATION PHASE\NBS\Standard Installation\NBS Installation Guide.pdf
  - ❖ Installation and Verification scripts for NBS Release R.1.2
- Disc1\NBS Deployment Methodology\02\_INSTALLATION and CONFIGURATION PHASE\NBS\Standard Installation\NBS Installation Validation.xls
  - ❖ Application validation for state users to validate NBS Release R.1.2
- Disc 1\NBS Deployment Methodology\04\_SYSTEM ADMINISTRATION\ NBS System Administration and Maintenance Guide.pdf
  - ❖ Updated the System Administration guide with a pointer to the new SRT Admin Module Guide and the new Alerts Admin Module Guide.

- Disc 1\NBS Deployment Methodology\02\_INSTALLATION and CONFIGURATION PHASE\NBS\Standard Installation\SRT and Alert Administration User Guide
  - ❖ This was created to assist users with exercising the new NBS alerts module
  - ❖ This was created to assist users with exercising the new SRT admin module

## ***6 Installation***

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For installation instructions, reference the NBS Installation Guide.pdf in Disc 1\NBS Deployment Methodology\02\_INSTALLATION and CONFIGURATION PHASE\NBS\Standard Installation.

## ***7 NBS Production Support***

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If support is required after reviewing the supplied documentation, consult the NEDSS User Group Collaboration Project (CDC Team) for updated information pertaining to the release. For instructions on how to enter an NBS helpdesk ticket, reference the following post on CDC Team:

- NBS: Production Support: Discussion: "162. NBS: Helpdesk Submit Incident Reporting Template"